

## Photographs

*John Squire presenting cheques to the 3 poster prize winners (top right & centre right). Among the scenes captured during the poster session, Tony Ryan demonstrates, to Liz Towns-Andrews, that life isn't so bad with only one good arm (top left). Patrick Fairclough asks John Pople how to dunk his strange looking biscuit (bottom right).*

The final day started with our third keynote speaker, Rick Millane (Purdue), who gave a detailed account of both uncorrelated and correlated disorder in polycrystalline fibres. Steve Maginn (MSI) gave a visual demonstration of the capabilities of the Cerius<sup>2</sup> computer program for both neutron and electron scattering, powder, crystalline or amorphous data. Chick Wilson (Rutherford) outlined his approach to Laue data collection on the SXD time of flight diffractometer at the ISIS facility. Peter Purslow (Royal Veterinary, Denmark) described his current work on the elasticity of fibrillin, a major component of elastic microfibrils. Tim Wess (Stirling) told us about his modelling work on the

structure of collagen and Nageena Malik (OU) continued the theme by telling us about stroma collagen, glycation and the preventative attributes of analgesics, especially aspirin. Neville Greaves (Daresbury) explained how simultaneous SAXS/XAFS/XRD could be used to probe the disorder-order transitions of cordierite glass ceramics. Helen Gleeson (Manchester) presented some recent results from liquid crystal studies using simultaneous SAXS/WAXS/RAMAN/DSC and how each technique can be used to probe a separate feature of the structure. Gordon Tiddy (Salford/Unilever) concluded the session by describing how shear and stopped-flow could be used to study the structure and kinetics of liquid crystals.

The workshop concluded with a special vote of thanks to Janet Smith and Diane Travis for all the hard work and organisation that went into making the whole meeting run smoothly.

A fuller account of the talks/posters presented at this workshop may be read later in this volume or viewed on the World Wide Web at:

<http://www.dl.ac.uk/SRS/CCP13/workshop96>.

Geoff Mant

## Synchrotron Radiation Summer School 1996, Italy

In October, 1996 a Summer School on 'Applications of Synchrotron Radiation in Life Sciences and Chemistry' was held at Maratea, Italy. Included as part of this were sessions on Fibre Diffraction given by Trevor Forsyth, Richard Denny and myself. The School was sponsored by the European Synchrotron Radiation Society (ESRS) and was organised by Malcolm Cooper (Warwick), Dominique Maes (Brussels) and Lorenzo Avaldi (Rome). About 50 students and 24 teachers participated in what proved to be a highly successful Workshop. Participants came from all over Europe (Italy, Portugal, France, UK, Germany, Belgium, Finland, Sweden, Denmark, Poland), and also from the US (Boston and Las Vegas). The School was held at the magnificent Hotel Villa del Mare in Maratea, which is on the west coast of southern Italy. For me a four hour train journey south from Rome, was followed by an 'interesting' minibus ride in the dark around a tortuous coastal route with many hairpin bends and a driver who must have been late for his supper. However, having arrived safely, I discovered that the

Hotel had a magnificent site, overlooking the sea close to Sapri, and that it was built into a sheer cliff down to the sea. The lecture room even had the exposed cliff face as one wall. Each level of the Hotel had creeper-hung veranda's, one of which can be seen in the photograph, and breathtaking views. Although it was a 'summer' school, it was obviously at the end of the season. The weather was not brilliant, but when an opportunity presented itself a number of hardy souls (not including me!) took the hotel lift down through the cliff to the private beach below and ventured into the sea. Others enjoyed swimming in the Hotel pool, although the only pool that I got near was the sort that happens on a baize-covered table with balls and a cue. The weather was actually very rough sometimes and the spray and water plumes emanating from the breakers crashing against the rocks surrounding the private beach were quite dramatic and very noisy.

I was involved in the School in three capacities. The first was to teach some basic biology to the students,





most of whom turned out to be chemists or physicists. The second was to provide an introduction to the theory of fibre diffraction, mainly helical diffraction, which was followed up by Richard Denny (Daresbury & Imperial College) on the effects of different kinds of disorder on helical diffraction patterns, and by Trevor Forsyth (Keele) on fibre diffraction from DNA. The third was to present an evening lecture on my own research topic, namely fibre diffraction studies of muscle. Richard and Trevor were also involved in setting up and running tutorial sessions on fibre diffraction, including hands-on experience of running some of the CCP13 programs. The students appeared to appreciate all of our efforts and it was a splendid opportunity to present our subject to a new generation of Synchrotron users. The School also provided an opportunity for us teachers to learn from each other. Not only were there some splendid talks, for example by Professor Malcolm Cooper on 'What is a photon? A cautionary historical tale', by Professor P. Suortti (ESRF) on 'Synchrotron Radiation in Medicine - Angiography' and by Professor G. Margaritondo (Lausanne) on 'Photoelectron Spectroscopy of Biological Materials', to name but three, but I personally enjoyed very much the tutorials on protein crystallography methods given by Fritjof Korber (Liverpool) and by Gerard Kleyvegt (Uppsala - who also, wittily, tried to teach us how to pronounce Å correctly - roughly 'ongstrerm'). All of the lecture notes were copied and collated for all participants and we each now have a very good 'hardcopy' overview of the uses of Synchrotron Radiation.

Apart from the formal scientific sessions, such Workshops are also an excellent way for people from different Countries and backgrounds to meet and to discuss their work in an informal way, sometimes over excellent Italian food (although my daily intake of kalamari -something I do not normally eat - was almost as great as that of the local white wine). Two very memorable social events come to mind. One was an evening of local traditional folk music and dance which was very delightful and the other was an excursion to the ruined city of Pompeii. Not only was the weather excellent on that day, but the place itself was amazing and well worth a visit. Amongst the most amazing things still to be seen are some of the original plumbing from a few years AD and some of the artwork on the walls of the houses. And, no, this artwork is not primitive. The use of perspective was impeccable and the images were very realistic. How did man then forget how to do it for centuries afterwards? It was a real eye-opener and showed how the culture of a very advanced civilisation, in housing, plumbing, central heating, architecture and art, can be lost and forgotten, only to be rediscovered centuries later. Pompeii even had traffic (chariot) control systems, pedestrian areas, supermarkets with special out of sight loading bays and street-corner pubs. So what's new? Well, no, they didn't have synchrotrons or fibre diffraction!

John Squire.